

(12) UK Patent Application (19) GB (11) 2 302 609 (13) A

(43) Date of A Publication 22.01.1997

(21) Application No 9612653.7

(22) Date of Filing 17.06.1996

(30) Priority Data

(31) 9512740

(32) 22.06.1995 (33) GB

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(51) INT CL⁶

G09F 23/00, E01F 9/011 9/03, G09F 13/16

(52) UK CL (Edition O)

G5C CFF

E1G GLV

(56) Documents Cited

GB 2035421 A WO 90/04190 A

(58) Field of Search

UK CL (Edition O) E1G GLJ GLK GLV, E1S SX SY,

G5C CEB CER CFF

INT CL⁶ G09F

ONLINE:WPI

(54) Scaffolding tube safety marker

(57) In order to avoid the manually intensive operation of wrapping hazard warning tape around scaffolding tube, the present invention proposes a snap-on safety marker. The scaffolding tube safety marker comprises an elongate hollow cylinder 1 of flexible material (eg. plastics) and whose wall is split from end to end whereby the cylinder can be snap-fitted onto scaffolding tubes. The external periphery of the cylinder carries a hazard marking comprising a spiral band of colour which appears as substantially discontinuous diagonal bands of colour from which ever direction it is viewed. The hazard marking may be, in part at least, reflective or flourescent.

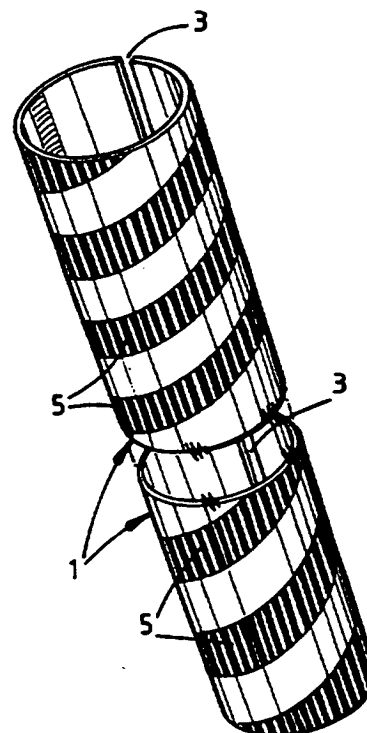


FIG. 1

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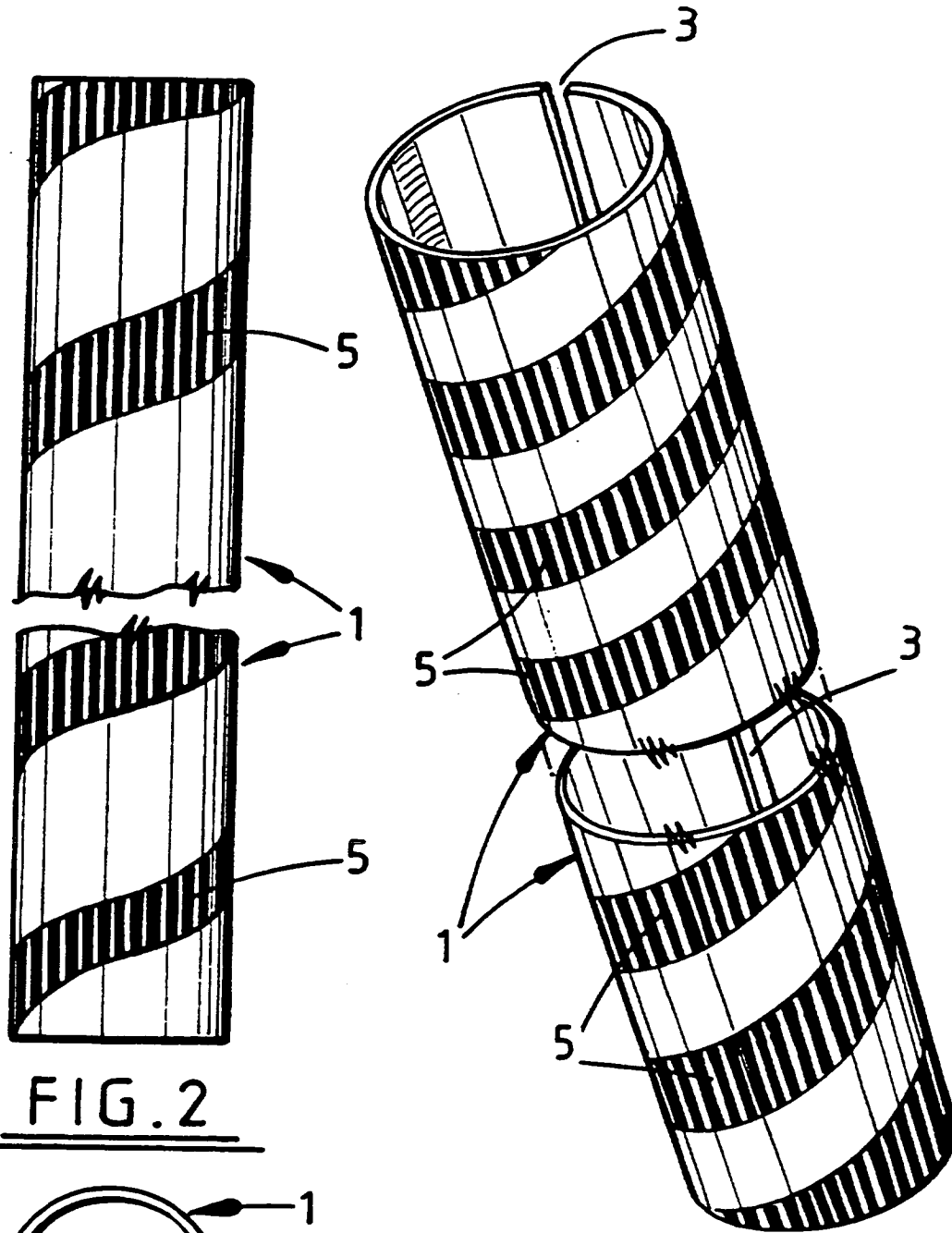


FIG. 2

FIG. 1

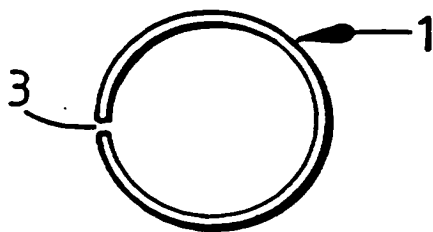


FIG. 3

TITLE: Scaffolding Tube Safety Marker

DESCRIPTION

The present invention relates to a scaffolding tube safety marker.

5 The erection of scaffolding presents a safety hazard both to pedestrians and vehicles especially where it is placed in walkways or projecting into roadways. Currently the only way of alerting attention to the presence of the scaffolding is to wrap lengths of
10 warning tape around the scaffolding or stretch it between the scaffolding poles, and reels of tape having alternate red and white diagonal bands are available for this purpose. However, it is very time-consuming to wrap the tape around the scaffolding tubing and it is
15 not particularly durable, and not readily reusable.

The present invention aims to provide a solution providing a hazard marker which is easy to apply and can be removed after use and re-used.

20 Accordingly, the present invention provides a scaffolding tube safety marker comprising an elongate hollow cylinder of flexible material whose wall is split from end to end, and wherein the external periphery of the cylinder carries a hazard marking comprising a spiral band of colour.

The spiral band has the advantage that from whichever direction the marker is viewed it appears as substantially discontinuous alternating diagonal bands of colour which is familiar as a hazard warning. It may be a single or multiple start spiral. The base colour of the marker may be reflective or non-reflective. The spiral band of colour is preferably reflective and is preferably fluorescent. An orange/red colour of spiral band on a white background is one possibility. Alternatively, alternating orange/red and yellow bands may be employed. Other colours may be employed and the choice of colours for the marker may be coordinated into a safety system with the colours indicating, for example, whether the area is a hard hat area, a protective clothing area, a safety goggle area or an ear protector area.

By splitting the cylinder along its length the marker can be readily fitted onto scaffolding tubing simply as a push-fit, and usually after the scaffolding has been erected. Removal is conveniently done on dismantling of the scaffolding where it can be slid off the end. Prising off is more difficult, hence deterring its removal.

Plastics is preferred for the material of the sleeve and it is conveniently supplied in one meter lengths. Plastics material can easily be cut up into

smaller lengths if necessary. A silk screen ink printing process may be used to produce the spiral marking.

5 The tube is preferably split longitudinally from end to end. We anticipate tubing made in diameters of 48mm with a wall thickness of 1mm, although these sizes are not to be taken as limiting.

10 The present invention will now be described further, by way of example only, with reference to the accompanying drawings, in which:-

Figure 1 is a perspective view of a scaffolding tube safety marker broken along its length according to the present invention,

15 Figure 2 is a side view of the marker according to the present invention also broken along its length, and

Figure 3 is a plan view.

20 Referring to the drawings, the scaffolding tube safety marker comprises an elongate hollow cylinder 1 made of plastics which is flexible and which has a longitudinal split 3 from end to end. The tube carries a spiral marking 5 extending from one end to the other whilst being physically broken by the longitudinal split. In one embodiment the spiral marking is
25 reflective and is applied by a silk screen ink printing process in a red/orange colour onto a white plastics.

As will be seen from Figure 2, when viewed side on the spiral marking appears as alternate diagonal bands. The split allows the tube to be flexed and fitted over a scaffolding tube and the diameter is chosen to suit typical scaffold tube diameter (say 48mm diameter). One meter lengths are convenient but this is by no means essential. The drawings show the length broken by way of illustration that the sleeve may be of any convenient length.

CLAIMS

1. A scaffolding tube safety marker comprising an elongate hollow cylinder of flexible material whose wall is split from end to end and wherein the external periphery of the cylinder carries a hazard marking comprising a spiral band of colour.
2. A scaffolding tube safety marker as claimed in claim 1, in which the marker has a base colour which is visible after application of the spiral band of colour.
3. A marker as claimed in claim 2, in which the base colour is reflective.
4. A marker as claimed in claim 2, in which the base colour is non-reflective.
5. A marker as claimed in any one of claims 1 to 4, in which the spiral band of colour is a single-start spiral.
6. A marker as claimed in any one of claims 1 to 4, in which multiple-start spirals are used for the spiral band of colour.
7. A marker as claimed in claim 6, in which at least two different spiral bands of colour are used.
8. A marker as claimed in any one of the preceding claims, in which the spiral band of colour is reflective.
9. A marker as claimed in any one of the preceding

claims, in which the spiral band of colour is fluorescent.

10. A marker as claimed in claim 1, in which at least two continuous spiral bands of colour are provided.

5 11. A marker as claimed in claim 10, in which the continuous spiral bands are of different colours.

12. A marker as claimed in claim 10 or 11, in which at least one of the bands is reflective.

10 13. A marker as claimed in any one of claims 10, 11 or 12, in which at least one of the bands is fluorescent.

14. A marker as claimed in any one of the preceding claims, in which the spiral markings are applied using a screen printing process.

15 15. A marker as claimed in any one of the preceding claims, in which the hollow cylinder is split longitudinally.

16. A marker as claimed in any one of the preceding claims, in which the cylinder is made of plastics.

20 17. A scaffolding tube safety marker constructed and arranged substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.



Application No: GB 9612653.7
Claims searched: 1 - 17

Examiner: Roger Casling
Date of search: 9 August 1996

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:
UK Cl (Ed.O): E1S(SX,SY), E1G(GLV,GLJ,GLK), G5C(CEB,CER,CFF)
Int Cl (Ed.6): G09F
Other: Online:WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
A	GB 2035421 A (WINSTANLEY)	claim 1 at least
X	WO 90/04190 A1 (ANDERSSON) see page 1 line 22 et seq	claims 1,15 and 16 at least

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

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